

PUBLISHED

UNITED STATES COURT OF APPEALS

FOR THE FOURTH CIRCUIT

HAROLD H. EMORY, JR., Individually
and as Administrator of the Estate
of Rosemary Marie Emory,
deceased,
Plaintiff-Appellant,

v.

No. 97-2577

MCDONNELL DOUGLAS CORPORATION,
Defendant-Appellee,

and

UNITED STATES OF AMERICA,
Defendant.

Appeal from the United States District Court
for the District of Maryland, at Baltimore.
Catherine C. Blake, District Judge.
(CA-95-1827-CCB)

Argued: May 6, 1998

Decided: June 22, 1998

Before WILKINSON, Chief Judge, LUTTIG, Circuit Judge, and
BEEZER, Senior Circuit Judge of the
United States Court of Appeals for the Ninth Circuit,
sitting by designation.

Affirmed by published opinion. Chief Judge Wilkinson wrote the
opinion, in which Judge Luttig and Senior Judge Beezer joined.

COUNSEL

ARGUED: Dean Elliot Swartz, SWARTZ & REED, Washington, D.C., for Appellant. Douglas E. Winter, BRYAN CAVE, L.L.P., Washington, D.C., for Appellee. **ON BRIEF:** Robert E. Wilson, WILSON & PARLETT, Upper Marlboro, Maryland, for Appellant. William C. Edgar, BRYAN CAVE, L.L.P., Washington, D.C.; Michael G. Biggers, Robert J. Dwyer, BRYAN CAVE, L.L.P., New York, New York, for Appellee.

OPINION

WILKINSON, Chief Judge:

Rosemary Emory was killed when an F/A-18 jet fighter crashed and slid into her truck. Appellant Harold Emory, her husband, sued the manufacturer of the aircraft, the McDonnell Douglas Corporation (MDC), under myriad strict liability and negligence theories. The district court granted MDC's motion for summary judgment, holding that the government contractor defense barred Emory's design defect and failure to warn claims. Emory appeals only with respect to his negligent failure to warn claim, arguing that the government contractor defense applies only to design defect claims. Because we find that Emory has failed to satisfy the basic state-law requirements for his failure to warn claim, we affirm the judgment of the district court.

I.

This appeal arises from an October 1, 1992 crash of an F/A-18 jet fighter at the Patuxent River Naval Air Station (Pax River) in Maryland. Prior to its arrival at Pax River, the crash aircraft was kept at the Naval Air Station at Cecil Field, Florida as a "hangar queen" -- a plane cannibalized to provide parts for the repair of other planes in the squadron. The Navy reassembled the aircraft and transferred it to Pax River in August 1992. In accordance with normal procedure, a Navy maintenance crew performed an acceptance inspection of the aircraft upon its delivery at Pax River. While conducting a flight control check during the course of that inspection, the maintenance crew

discovered a problem. The flight computer displayed codes indicating a failure in the aircraft's flight control system (FCS).

The F/A-18's flight computer performs a variety of built-in tests (BITs) to identify FCS failures. Periodic BITs are run automatically by the flight computer to check limited aspects of the FCS. In addition, the flight and maintenance crews may initiate distinct BITs on their own. For example, pilots run a preflight BIT to check the aircraft's FCS before takeoff. The FCS failures detected by these BITs are indicated in a number of ways, including the display of BIT Logic Inspection (BLIN) codes and X's on the cockpit screen. BLIN codes correspond to different types of FCS failures. When used in conjunction with the F/A-18 maintenance manuals, BLIN codes direct specific procedures for identifying and fixing FCS failures. The display of an X on the cockpit screen indicates the failure of a computer channel connected to one of the flight control surfaces.

In this case, the BLIN codes discovered during the acceptance inspection indicated a failure related to the aircraft's rudders. Working alongside Michael Kidder, MDC's Contract Field Service Representative, the Navy maintenance crew attempted numerous repairs to eliminate the BLIN codes. Despite such attempts, the BLIN codes could not be eliminated. Neither the Navy maintenance crew nor Kidder could determine the cause of the codes. Yet because no X's had appeared on the cockpit screen, and because repeated checks and functional tests of the rudders uncovered no problems, the aircraft was not placed in a down status. Kidder testified that, although his final advice was to identify and fix whatever problem was causing the BLIN codes, he did not believe the aircraft was unsafe for flight. The Navy too concluded the aircraft was safe to fly and thereafter flew it in approximately ten missions.

On October 1, 1992, the aircraft was assigned to another mission. Major Douglas Yurovich and Lieutenant Colonel Troy Pennington served as the pilot and copilot respectively of the crash aircraft that day. Sometime before takeoff, the cockpit screen displayed X's and BLIN codes with respect to the aircraft's rudders. Yurovich responded by activating the FCS reset to clear the displays. Because the X's and BLIN codes did not reappear, the pilots decided the plane was safe to fly and took off.

Almost immediately upon leaving the ground, however, the X's reappeared. The aircraft simultaneously experienced a mild left yaw -- a side-to-side, fishtailing movement. Yurovich gained control of the aircraft and then reset the FCS. The response seemed successful, as the flight proceeded without incident for a period of between forty-five and eighty minutes. At that point, though, the X's and BLIN codes reappeared and the aircraft experienced another mild yaw. Yurovich again activated the FCS reset, but the X's and BLIN codes returned. In light of these repeated indicators of FCS failures, Yurovich and Pennington decided to discontinue the mission and to return to Pax River.

As the aircraft approached the runway, it experienced yet another yaw. Fearing a potentially fatal crash landing, Yurovich aborted the approach, reset the FCS, and began to prepare a second landing attempt. Soon thereafter, however, the aircraft experienced a significant yaw, rolled to the right, and pitched down. Believing a crash to now be a certainty, Pennington pulled his ejection handle, causing both himself and Yurovich to eject safely. Sadly, however, the aircraft crashed and slid into Mrs. Emory's truck, resulting in her death.

Mr. Emory filed this suit on behalf of himself and as the administrator of his wife's estate. Emory sued the United States and MDC, stating a negligence claim against the government and both negligence and strict liability claims against the contractor. The United States settled its claims with Emory for \$800,000. The district court later granted MDC's motion for summary judgment, finding that the government contractor defense barred both Emory's design defect and failure to warn claims. The district court also concluded that Emory's manufacturing defect claims were not supported by the evidence. Emory now appeals only the dismissal of his negligent failure to warn claim.

II.

The district court dismissed Emory's negligent failure to warn claim on the basis of the government contractor defense recognized in Boyle v. United Technologies Corp., 487 U.S. 500 (1988). Emory claims that dismissal on this ground was error. He argues that Boyle bars only a design defect claim and that the defense adopted in that

decision should be held inapplicable to a failure to warn claim. While it is true that the Court in Boyle adopted the government contractor defense in the design defect context, many circuits have since held that the defense should also apply to failure to warn claims. See, e.g., Tate v. Boeing Helicopters (Tate II), 140 F.3d 654 (6th Cir. 1998); Snell v. Bell Helicopter Textron, Inc., 107 F.3d 744, 749-50 (9th Cir. 1997); Oliver v. Oshkosh Truck Corp., 96 F.3d 992, 1003-04 (7th Cir. 1996), cert. denied, 117 S. Ct. 1246 (1997); Butler v. Ingalls Shipbuilding, Inc., 89 F.3d 582, 586 (9th Cir. 1996); Perez v. Lockheed Corp. (In re Air Disaster at Ramstein Air Base), 81 F.3d 570, 576 (5th Cir.), modified on other grounds, 88 F.3d 340 (5th Cir.) (per curiam), cert. denied, 117 S. Ct. 583 (1996); Tate v. Boeing Helicopters (Tate I), 55 F.3d 1150, 1156-58 (6th Cir. 1995); In re Joint E. & S. Dist. N.Y. Asbestos Litig., 897 F.2d 626, 629-30 (2d Cir. 1990). While we find these decisions to be reasoned soundly, we hold that Emory's claim founders on an even more fundamental point -- the failure to satisfy the basic state-law requirements of his negligence claim.

Under Maryland law,* a manufacturer has no duty to warn of an open and obvious danger in its product. Mazda Motor Co. of Amer., Inc. v. Rogowski, 659 A.2d 391, 395 (Md. Ct. Spec. App. 1995); Nicholson v. Yamaha Motor Co., Ltd., 566 A.2d 135, 145 (Md. Ct. Spec. App. 1989). Of course the question of whether a danger is open and obvious cannot be analyzed in a vacuum. Rather, the determination turns on the expected user's knowledge of that product: "Whether there is a duty to warn and the adequacy of warnings given must be evaluated in connection with the knowledge and expertise of those who may reasonably be expected to use or otherwise come into contact with the product" Mazda, 659 A.2d at 395 (quoting 1 American Law Product Liability 3d § 32:61 (1987)); see also W. Page Keeton et al., Prosser and Keeton on the Law of Torts § 96, at 686-

*As Emory filed his suit in the United States District Court for the District of Maryland, we follow Maryland's choice of law rules. Klaxon Co. v. Stentor Elec. Mfg. Co., 313 U.S. 487, 496 (1941). Maryland follows the lex loci delictus principle in determining which jurisdiction's law applies to tort actions. Chambco v. Urban Masonry Corp., 659 A.2d 297, 299 (Md. 1995). Maryland law applies because the site of the crash was in Maryland.

87 (5th ed. 1984) ("[C]ourts have usually meant by 'obvious danger' a condition that would ordinarily be seen and the danger of which would ordinarily be appreciated by those who would be expected to use the product.") (emphasis added). Accordingly, if the expected user possesses extensive knowledge about the relevant product, it is difficult to establish a duty to warn on the part of the manufacturer. Under Maryland law, "a manufacturer or supplier has no duty to warn if the hazard is one of which the plaintiff or other user has equal knowledge The duty to warn extends only to those who can reasonably be assumed to be ignorant of the danger." Mazda, 659 A.2d at 395 (quoting 1 American Law Product Liability 3d§ 32:61 (1987) (footnotes omitted)).

This elementary principle controls this case. Emory asserts that MDC's on-site representative, Michael Kidder, knew the crash aircraft was unsafe and yet failed to alert the Navy of this fact. To establish that MDC had a duty to warn the Navy, however, Emory must prove that the Navy could "reasonably be assumed to be ignorant" of the dangers present in the aircraft. The evidence submitted to the district court, however, establishes convincingly that the Navy had extensive knowledge of the hazards associated with the F/A-18 aircraft.

Initially, at a general level, the Navy played a significant and instrumental role in the design and production of the F/A-18. We have previously recognized "the Navy's extensive participation" in the F/A-18's evolution, concluding specifically that "the Navy was intimately involved at various stages of the design and development process." Kleemann v. McDonnell Douglas Corp., 890 F.2d 698, 701 (4th Cir. 1989). In that case, we noted that the final design contract issued by the Navy to MDC incorporated the company's original specifications as well as modifications agreed upon through extensive negotiations between the parties. During the F/A-18's development, the Navy required MDC to submit detailed drawings at each stage. MDC could implement changes to the F/A-18's design only with the Navy's approval. The Navy even maintained representatives at MDC's facilities in St. Louis throughout the F/A-18 design and production phases. Id.

The Navy's active involvement is also amply demonstrated by the record in this case. The evidence confirms that the Navy required

MDC to submit detailed drawings of the aircraft's FCS, as well as FCS failure analysis reports. MDC was obligated to apprise the Navy of the specifications defining each individual component of the FCS. The record also reveals that the Navy's review of MDC's submissions was careful and detailed, as the Navy commented on and regularly identified desired changes in the FCS. Finally, the Navy and MDC conducted extensive tests on eleven F/A-18 aircraft-- including the FCS of each -- at Pax River between 1979 and 1981. The Navy then performed its own tests and evaluations of the FCS. In sum, the Navy's substantial participation in the aircraft's design and development demonstrates that it was hardly a party who could reasonably be assumed to be ignorant of the F/A-18's potential dangers. In a similar case the Fifth Circuit, applying principles of Georgia tort law, concluded that the Air Force's involvement in the C-5A project negated the existence of a duty to warn on the part of the government contractor there. See *Perez*, 88 F.3d at 341 ("[T]he Air Force was so involved in the C-5A project it knew about the danger -- if any -- inherent in the circuit design. Therefore, the defendants did not have a duty to warn the Air Force.").

The evidence submitted to the district court also makes clear that the Navy had specific knowledge of possible FCS failures and the precautions and responses that should accordingly be taken. Just as the Navy participated extensively in the F/A-18's design and production, it also worked closely with MDC in the development of the manuals designed for use in connection with the aircraft. The Naval Aviation Training and Operations Standardization (NATOPS) Manual contains information on ground and flight procedures for the F/A-18 and is issued to all air crews. F/A-18 maintenance manuals outline procedures for the troubleshooting and repair of the aircraft. Although MDC prepared the initial drafts of both the NATOPS and maintenance manuals, the Navy subjected all of the manuals to a rigorous validation process. Since the manuals were first developed, the Navy has retained complete control over their text. Naval officers who note a deficiency in the NATOPS manual are obliged to bring it to the attention of the manual's manager. The Navy also continually reconfirms the accuracy and sufficiency of the maintenance manuals.

The Navy's involvement in the development and constant revision of these manuals again reveals its knowledge of the potential dangers

associated with the F/A-18's use. The Navy's own maintenance manuals in use at the time of the crash explained that BLIN codes signified FCS failures. With respect to the specific BLIN codes discovered during the acceptance inspection of the crash aircraft, the Navy maintenance manuals directed the Navy to check the cross channel discrete wires and connector pins. The codes also signaled to the Navy that a functional test of the rudders should be performed by the maintenance crew. The presence of such information in the Navy's own manuals demonstrates that it had considerable knowledge concerning the FCS problems ultimately encountered on the crash aircraft. Indeed, the Navy manuals themselves contain a plethora of warnings that pertain to plaintiff's allegations in this case.

Just as telling is the history of the Navy's involvement with the NATOPS Manual's instructions concerning preflight procedures. The 1981 preliminary NATOPS manual contained a requirement that each flight crew conduct a successful BIT -- one that does not result in the display of X's or BLIN codes -- before takeoff. Although this requirement was removed later that year, MDC recommended at a 1983 NATOPS review conference that the requirement be reinstated to the manual. The Navy agreed and incorporated a similar recommendation once again as part of the NATOPS manual's required preflight procedure. But in 1984 the Navy reversed course again and removed the requirement. This history shows that the Navy was well aware of another of the very hazards ultimately experienced with the crash aircraft in this case.

In light of the overwhelming evidence of the Navy's knowledge of the F/A-18 generally, and its plain awareness of potential FCS failures specifically, we find that the Navy could not reasonably be assumed to be ignorant of the dangers associated with the crash aircraft. Accordingly, we hold that Emory has failed to establish that MDC had a duty to warn the Navy of potential hazards making the crash aircraft unsafe for flight.

Emory contends, however, that we must focus on what the Navy actually knew about the crash aircraft in this case. He asserts, without elaboration, that the Navy was unaware of dangers known only to MDC that made the crash aircraft unsafe for flight. Emory thus maintains that because the Navy did not know the plane was unsafe to fly,

MDC did bear a duty to warn. We disagree. The determination of whether a danger is obvious to an expected user is an objective one. We do not inquire whether the user in the case before us had actual knowledge of the danger identified in the plaintiff's pleadings. As the Maryland courts have explained, "The question is not whether the particular plaintiff actually foresaw the potential danger but whether the danger was sufficiently evident that a reasonable buyer in the plaintiff's position would have foreseen it." Nicholson, 566 A.2d at 145. The user here, the Navy, occupied a unique position. It not only participated in the design and development of the product it purchased and used, but it also played an instrumental role in the creation and revision of procedures for use and repair of that product. In sum, the Navy's actual knowledge is irrelevant; we can confidently conclude that a reasonable buyer in the Navy's position would be assumed to be aware of such dangers.

Moreover, Emory cannot maintain a claim that MDC failed to warn the particular pilots about the unsafe condition of the crash aircraft. As the district court noted, "nothing in the case law suggests that a military contractor is responsible for directly warning the individual military personnel who fly the planes under military command." Under Maryland's sophisticated user defense, a supplier is not negligent when it relies on an intermediary "already well aware of the danger" to relay any necessary warning. Eagle-Picher Indus., Inc. v. Balbos, 604 A.2d 445, 463-65 (Md. 1992). Indeed, when the Navy possesses the same knowledge as its contractor, a requirement that the contractor provide additional warnings to individual pilots risks disruption of the chain of command. A contractor cannot be forced to provide warnings to officers that would contradict orders received from their superiors. When, as here, the Navy examines and decides upon the content of specific warnings, the requirement of further warnings to particular pilots presents a real conflict with -- and seriously undermines -- the Navy's structure of command. The district court therefore correctly concluded that "whether or how those warnings are conveyed to individual Naval officers under military command seems beyond the scope of any duty appropriate to impose on the contractor."

The settled grounds of state products liability law thus suffice to protect the precise federal interest identified by the Supreme Court in

Boyle -- the government's ability to make discretionary decisions about military defense. See Boyle, 487 U.S. at 511. The government's capacity to exercise its discretion is implicated whenever the allegedly tortious decisions attributed to the contractor are actually discretionary decisions made by the government itself. See id. at 512. In this case, the evidence demonstrates that the Navy participated extensively in the F/A-18 program. It knew the aircraft intimately, and it ultimately called the shots. Its decision to fly the plane in the face of potential FCS failures was an informed, if ultimately incorrect, one. Under Maryland law, MDC had no duty to warn. The government contractor defense adopted in Boyle rests at bottom on conflict between federal and state law. See id. at 507-08. Application of Maryland law here, because it in fact reinforces the federal interest protected by the Boyle defense, poses no conflict. Inasmuch as Maryland law reflects the general rule that the Navy's intimate participatory role negates the existence of a duty to warn on MDC's part, it affords a sound basis upon which to affirm the judgment of the district court.

III.

The district court also found that MDC shared everything it knew with the Navy, and that there was no evidence that MDC representatives "believed the flight was unsafe and failed to tell the Navy." In view of our foregoing discussion, however, we need not address the various other grounds defendant has advanced for upholding the district court. The judgment of the district court is affirmed.

AFFIRMED